CLAIMS

What is claimed is:

1. A method comprising:

receiving a start flow control signal;

5   receiving a stop flow control signal;

determining a timing difference between the receipt of the start flow control signal

and the stop flow control signal; and

determining an initial rate based at least in part on the determined difference.

2. The method of claim 1, further comprising comparing the timing difference to a

10   predetermined threshold to produce a comparison result; and adjusting the initial rate

based at least in part on the comparison result.

3. The method of claim 2, wherein adjusting the initial rate includes increasing the

initial rate if the timing difference was less than the predetermined threshold.

4. The method of claim 2, wherein adjusting the initial rate includes decreasing

15   the initial rate if the timing difference was greater than the predetermined threshold.

5. The method of claim 1, further comprising setting a current rate to the initial

rate; and increasing the current rate.

6. The method of claim 5, wherein increasing the current rate includes doubling a

value of the current rate.

7. The method of claim 6, further comprising comparing the current rate to a maximum rate, and setting the current rate to the maximum rate.

8. The method of claim 5, further comprising generating a set of tokens based on the value of the current rate.

5   9. A computer-readable medium containing computer-executable instructions for performing the method of claim 1.

10. A method comprising:

receiving a start flow control signal;

receiving a stop flow control signal;

10   determining a timing difference between the receipt of the start flow control signal and the stop flow control signal; and

exponentially decreasing an initial rate if the time difference is greater than the predetermined threshold.

11. The method of claim 10, further comprising multiplicatively increasing the

15   initial rate if the difference is less than a predetermined threshold.

12. The method of claim 11, wherein said multiplicatively increasing the initial rate includes doubling the initial rate.

13. The method of claim 10, wherein said exponentially decreasing the initial rate includes raising the initial rate to a one-half power.

14. The method of claim 10, further comprising multiplicatively increasing a current traffic rate.

15. A computer-readable medium containing computer-executable instructions for performing the method of claim 10.

5   16. A method comprising:

receiving one or more flow control signals;

multiplicatively increasing a current transmission rate; and

exponentially decreasing an initial value of the current transmission rate in response to the received one or more flow control signals.

10   17. The method of claim 16, further comprising:

multiplicatively increasing the initial rate if the difference is less than a predetermined threshold; and

exponentially decreasing the initial rate if the difference is greater than the predetermined threshold.

18. An adaptive rate control mechanism comprising:

a rate controller; and

a timing mechanism;

wherein the rate controller receives a start flow control signal and a stop flow

5   control signal, determines a timing difference between the receipt of the start flow control

signal and the stop flow control signal, and determines an initial rate based at least in part

on the determined difference.

19. The adaptive rate control mechanism of claim 18, wherein the rate controller

compares the timing difference to a predetermined threshold to produce a comparison

10   result, and adjusts the initial rate based at least in part on the comparison result.

20. The adaptive rate control mechanism of claim 19, wherein adjusting the initial

rate includes increasing the initial rate if the timing difference was less than the

predetermined threshold.

21. The adaptive rate control mechanism of claim 19, wherein adjusting the initial

15   rate includes decreasing the initial rate if the timing difference was greater than the

predetermined threshold.

22. The adaptive rate control mechanism of claim 18, wherein the rate controller

sets a current rate to the initial rate, and increases the current rate.

23. The adaptive rate control mechanism of claim 22, wherein increasing the current rate includes doubling a value of the current rate.

24. The adaptive rate control mechanism of claim 23, wherein the rate controller compares the current rate to a maximum rate, and sets the current rate to the maximum

5   rate.

25. The adaptive rate control mechanism of claim 22, wherein the rate controller generates a set of tokens based on the value of the current rate.

26. An apparatus comprising:

means for receiving a start flow control signal;

10   means for receiving a stop flow control signal;

means for determining a timing difference between the receipt of the start flow control signal and the stop flow control signal; and

means for determining an initial rate based at least in part on the determined difference.

15   27. The apparatus of claim 26, comprising means for comparing the timing difference to a predetermined threshold to produce a comparison result; and means for adjusting the initial rate based at least in part on the comparison result.

28. The apparatus of claim 27, wherein adjusting the initial rate includes increasing the initial rate if the timing difference was less than the predetermined threshold.

29. The apparatus of claim 27, wherein adjusting the initial rate includes

5   decreasing the initial rate if the timing difference was greater than the predetermined threshold.

30. The apparatus of claim 26, comprising means for setting a current rate to the initial rate; and means for increasing the current rate.

31. The apparatus of claim 30, wherein increasing the current rate includes

10   doubling a value of the current rate.

32. The apparatus of claim 31, comprising means for comparing the current rate to a maximum rate, and means for setting the current rate to the maximum rate.

33. The apparatus of claim 30, comprising means for generating a set of tokens based on the value of the current rate.